The Development and Evaluation of a Lung Cancer Screening Decision Aid

By Katelyn Hart, BSN, RN

Purpose
To develop an evidence-based decision aid directed towards those eligible for lung cancer screening that is accepted and adopted by healthcare providers that will:
- Increase patient knowledge of lung cancer and screening
- Decrease decisional conflict/anxiety,
- Help the patient come to an informed decision about lung cancer screening.

Clinical question developed using PICO:
Is a decision aid to promote lung cancer screening acceptable among healthcare providers?

Theoretical Framework

Dr. Everett Rogers: Diffusion of Innovation

Dr. Everett Rogers developed the Diffusion of Innovation in 1962 which focuses on engaging the community on innovative practices. Since screening for lung cancer is a relatively new practice guideline, increasing community awareness and adoption is critical.

Stages of Adopting Innovation
1. Awareness: Identifying the need for change
2. Decision: Accept/reject change or innovation
3. Initial Use: Testing phase
4. Continued Use: Adopting

Five Main Factors of Adopting Innovation
1. Five Main Factors of Adopting Innovation
2. Relative Advantage: the degree of improvement from the new method versus the current/old method
3. Compatibility: how well the new method flows with the population
4. Complexity: how hard the new method is to implement and use
5. Triability: the extent to which the new method can be tested before it is completely adopted or declined
6. Observability: the magnitude of results

Survey Results

Of the 18 surveys, 12 were returned that were eligible for inclusion in the project.

Current Use of LCS:
- 41.7% currently recommend screening
- while 58.3% do not currently recommend screening

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likes appearance</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>41.7% (5)</td>
<td>58.3% (7)</td>
</tr>
<tr>
<td>Easy to understand</td>
<td>0</td>
<td>8.3% (1)</td>
<td>0</td>
<td>41.7% (5)</td>
<td>50% (8)</td>
</tr>
<tr>
<td>Needs more information on risks of screening</td>
<td>0</td>
<td>33.3% (4)</td>
<td>25% (3)</td>
<td>16.7% (2)</td>
<td>16.7% (2)</td>
</tr>
<tr>
<td>Needs more information on benefits of screening</td>
<td>0</td>
<td>50% (6)</td>
<td>25% (3)</td>
<td>25% (3)</td>
<td>0</td>
</tr>
<tr>
<td>My patients will use this decision aid</td>
<td>0</td>
<td>0</td>
<td>33.3% (4)</td>
<td>25% (3)</td>
<td>41.7% (5)</td>
</tr>
<tr>
<td>This will help patients make an informed choice</td>
<td>0</td>
<td>0</td>
<td>8.3% (1)</td>
<td>41.7% (5)</td>
<td>50% (8)</td>
</tr>
<tr>
<td>This will help start a conversation with my patients</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>41.7% (5)</td>
<td>58.3% (6)</td>
</tr>
<tr>
<td>I could use this regularly in practice</td>
<td>0</td>
<td>0</td>
<td>8.3% (1)</td>
<td>41.7% (5)</td>
<td>50% (6)</td>
</tr>
<tr>
<td>This will increase participation in screening</td>
<td>0</td>
<td>0</td>
<td>8.3% (1)</td>
<td>33.3% (4)</td>
<td>58.3% (7)</td>
</tr>
</tbody>
</table>

- 100% agree that lung cancer screening is beneficial to those eligible
- 75% believe that they have many patients that are eligible for screening in their practice

Discussion

The recommended edits were incorporated: see highlight portion of edited decision aid
- Interestingly, results showed only 41.7% currently recommend screening yet 100% agreed it would be beneficial
- 91.6% believe using this decision aid will help increase the # of patients participating in screening and 91.7% could see themselves using this aid on a regular basis
- Future projects should be done analyzing the use of the aid on a regular basis with patients

Table 4: Review of the Decision Aid Survey Results

University of South Florida College of Nursing